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ALBERT DE HALLER.

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MEMOIRS

OF

ALBERT DE HALLER, M.D.

MEMBER OF THE

SOVEREIGN COUNCIL OF BERNE;

PRESIDENT OF THE UNIVERSITY,

AND OF

THE ROYAL SOCIETY OF GOTTINGEN;

FELLOW of the ROYAL SOCIETY of LONDON, &c.

Compiled, chiefly, from the ELOGIUM ſpoken before the

ROYAL ACADEMY OF SCIENCES AT PARIS,

And from the *Tributes* paid to his Memory

BY OTHER FOREIGN SOCIETIES.

By THOMAS HENRY,

Fellow of the *Royal Society*, *Member* of the *Medical Society* of *London*, and of the *Literary* and *Philoſophical Society* of *Mancheſter*.

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TO THE

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AND MEMBERS OF THE

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GENTLEMEN,

THE promotion of the progreſs and intereſts of Literature and Philoſophy, being the avowed end of the very

laudable Inſtitution, which we have ſo happily eſtabliſhed among ourſelves; I feel a peculiar propriety in dedicating to You the Memoirs of the immortal HALLER, whoſe time and abilities were continually employed, in contributing to the enlargement of the bounds of Science, and ſupporting the welfare of humanity.

AMONG the different branches of hiſtory, none is, perhaps,

perhaps, more uſeful, none more inſtructive, none more entertaining, than Biography. The lives of eminent men hold up to our view, not only objects of admiration, but ſometimes of emulation. But the hiſtories of men engaged in deſtructive wars, or in revolutions effected oftener by the madneſs, ambition or reſentment, than by the patriotiſm of their conductors, fill the mind more ſtrongly with horror than delight, and, happily,

excite our deteſtation, rather than ſtimulate us to imitate them. When we behold an Alexander lamenting that he had no more worlds to conquer, we abhor the deſtroyer of mankind; when we ſee a Marius and a Sylla ſhedding the blood of thouſands and ten thouſands of their countrymen, not to promote the intereſts, ſecure the privileges, or increaſe the liberty of Rome, but to eſtabliſh an unconſtitutional dominion over her citizens,

citizens, we ſhrink from the dreadful narration, and ſhudder at the recollection of ſuch wanton ſlaughter, and horrid cruelty; and, ſurpriſed that ſuch monſters ſhould find favourers and partizans among the people, to effect their own deſtruction, we are impelled to exclaim,

Quò quò ſceleſti ruitis? aut cur dexteris
Aptantur enſes conditi? *

Nor are the lives of princes, of ſtateſmen, or of heroes, even

* Horatii Epod. Lib. IV. Od. 7.

of thoſe whoſe characters are more exempt from vice, or diſtinguiſhed for virtue, ſo fraught with utility to the generality of readers, as thoſe of men more upon a level with themſelves. The biography of the former may ſerve, indeed, as has been obſerved by an ingenious cotemporary writer,* "to enable "the philoſopher to form a "more complete idea of hu-

* KNOX's Eſſays Literary and Moral, Vol. II. Eſſay XCIV.

"man

" man nature, in all the gra-
" dations of degeneracy and
" perfection." It may tend to deter the great from ſchemes of vain and deluſive ambition; to raiſe the ſpirit of patriotiſm to attempt the ſalvation of their bleeding country; or inſpire the ſoldier with martial ardour, and rouſe him to deeds of hardihood, and " to ſeek the bubble reputation even in the cannon's mouth." * But theſe are leſſons by which few are

* Shakeſpear.

in

in circumſtances to profit; and the opportunities for ſuch extraordinary exertions, rarely occur.

VERY different is the caſe with reſpect to the biography of men of the middle walk of life, who, though they have peaceably "held the noiſeleſs tenor of their way," and their lives may not have teemed with ſplendid events, yet have lived the active friends of mankind and their fellow

fellow creatures,—have by their doctrines and examples, improved human morals; by their application and ingenuity, cultivated and increaſed the arts; and, by their learning and ready communications, diffuſed and extended the benefits of philoſophy and general ſcience;—who, inſtead of paſſing their lives in luxury and debauchery; inſtead of ſtudying, and ſedulouſly making uſe of, the arts of deſtruction; of inventing engines to increaſe

creaſe the devaſtations of war, and the carnage of the human race; have been employed in correcting their vices, ſoftening their diſtreſſes, adding to their comforts, or curing their diſeaſes; and, by ſuch means, in increaſing the proſperity and population of their country.—The diligence, by which they have accompliſhed theſe important purpoſes, is within our reach to copy; their virtues are of a kind we may imitate; and their acquirements often ſuch

as

as we need not deſpair of ſurpaſſing, at leaſt of equaling.

Eſt quoddam prodire tenùs ſi non datur ultrà.*

And even, if we ſucceed not fully in the attempt, the failure will be productive of no injury.—We ſhall find ourſelves better and wiſer men for the efforts we have made.

IMPRESSED with theſe ideas, I was induced, ſome time ago, to tranſlate the Elogium of

* Horat. Epiſt. I. Lib. 1.

M. de

M. de Haller, from the Memoirs of the French Academy of Sciences, and, at firſt, intended it ſolely for the entertainment of our Society, on a vacant night, when we happened to have no original paper before us. Additional materials have, ſince, been kindly ſupplied, by the favour of a friend;* and, from the ſame motives which led to the tranſlation, I have now determined to publiſh, what I

* Dr. Samuel Foart Simmons.

truſt

truſt will not be an unuſeful article of biography.

THOUGH born with ſplendid talents, M. de Haller did not, as is too often the caſe, depend on the native brilliancy of his genius, but eagerly embraced every poſſible means of improving it; and he was indefatigable in acquiring a knowledge of every ſcience, neceſſary to his profeſſion and ſituation. Though deeply ſkilled

in

in natural philoſophy, and intimately acquainted with *ſecond* cauſes, his piety was undiminiſhed, and he attributed to the GREAT CREATOR of all things, the *primary* direction and government of all his works: and, though ſtrongly attached to his family and the comforts of domeſtic life, he zealouſly attended to the diſcharge of his public duties, as a profeſſor, a citizen, and a magiſtrate.

To

To your patronage I commit the Volume; and am happy in this public opportunity of expreſſing the eſteem and affection, with which I have the honour to be,

GENTLEMEN,

Your moſt faithful Friend,

and obliged, humble Servant,

T. HENRY.

MANCHESTER,
March 25, 1783.

MEMOIRS

OF

ALBERT DE HALLER,

M. D. &c.

ALBERT DE HALLER, Member of the Sovereign Council of Berne, Preſident of the Œconomic Society of that city, and of the Univerſity of Gottingen, Foreign Aſſociate of the Academy of Sciences of Paris, and of almoſt all the learned

Societies of Europe, was born at Berne, on the eighteenth day of October, 1708. His father was Nicholas de Haller, Advocate and Chancellor of the county of Baden, deſcended from an ancient patrician family of the city of Berne, and his mother Anne-Mary Enguel, daughter of one of the members of the ſovereign council of that republic.

Young Haller, in his very early infancy, manifeſted an uncommon genius, activity of mind, and facility for labour, together with

with that ſtrength of memory, which is ſo neceſſary to thoſe who are deſirous of comprehending many ſciences, and purſuing their great operations; and that taſte for forming collections, which contributed ſo eſſentially to the many valuable works which he afterwards publiſhed.

Born of a family which had always been diſtinguiſhed for piety, he was uſed, when only four years old, to make ſhort exhortations to the domeſtics, on texts of Scripture, at the cuſtomary family

prayers. When nine years old, he had compoſed, for his own uſe, a Chaldaic grammar, a Hebrew and Greek lexicon, and alſo an hiſtorical dictionary, containing more than two thouſand articles, extracted from thoſe of Moreri and Bayle.* Theſe collections he con-

* M. TSCHARNER in his Eloge on M. Haller, ſpoken before the œconomic ſociety of Berne, takes no notice of the firſt of theſe anecdotes, but mentions M. Haller having formed, for his own uſe, rules in grammar, arithmetic, and other ſciences; and that at nine years of age he tranſlated Greek, and was acquainted with the rudiments of the Hebrew language.

tinued

tinued till his departure for the univerſity, at which period, the work was grown to a very conſiderable extent; but he ſuppreſſed it afterwards, as being unequal to his ideas. Theſe premature talents were not the effect of his education; the mode of which was very unfavourable to their improvement. Young Haller's father was apprehenſive that his ſon's eagerneſs to learn every thing, would be productive of only ſuperficial knowledge; nor would theſe fears have been ill-founded, if he had not poſſeſſed an uncommon capacity.

Urged perhaps by theſe motives, the Advocate placed him under the tuition of a preceptor, who, though he poſſeſſed ſufficient knowledge of the languages, derived his principal credit from the perſecution to which he had been expoſed by his religious opinions. This man's behaviour to his pupil, was ſtern and ſevere, though his feeble conſtitution, and ardour for ſtudy, only required indulgence and proper direction.

This rigorous and pedantic education might have nipped M. de Haller's

Haller's genius in the bud. The harſhneſs of ſuch a preceptor would have given another child a diſguſt to ſtudy: but it only inſpired him with a deſire of revenging himſelf. This he did in a ſatire againſt his tutor, written in Latin verſe, which he compoſed at the age of ten years; though ſo ſtrong was the impreſſion on his mind, that he never could ſee him afterwards, without feeling a kind of involuntary terror. A ſimilar circumſtance has been related of M. de la Condamine. Theſe facts prove, that children are more ſuſceptible,

than one would imagine, of ſtrong and durable paſſions; ſo that frequently the character has taken a bias, and therefore the moſt important object of education is either fulfilled or fruſtrated, before we have an opportunity of entering carefully on the direction of it.

M. DE HALLER was only thirteen years old, when he loſt his father, who intended him for the Church, and whoſe property was almoſt wholly confined to the appointments of his places. But by loſing his father and his fortune, he

he acquired the liberty of chuſing the objects of his ſtudies, and became acquainted with the neceſſity of depending entirely on himſelf. Nay, perhaps it was to theſe misfortunes, that he owed both his talents and ſubſequent exalted reputation.

He was placed for ſome time at the public ſchool, where he gave many proofs of early genius and uncommon abilities. He paſſed through his claſſical examinations before the age that is preſcribed, and he tranſlated into Greek, the theme

theme which was required of him only in Latin. After eighteen months ſpent in this ſlow and conſtrained mode of inſtruction, he obtained leave to paſs ſome time at Bienne, with the father of one of his ſchool-fellows, who was a celebrated phyſician, and from whom he hoped to receive ſome lights on the ſtudy of nature; but this new maſter was enthuſiaſtically attached to the ſyſtems of Deſcartes, and conformable to them was the inſtruction his pupil received. The young ſtudent therefore preferred the fictions of poetry to thoſe of philoſophy;

philoſophy; as frequently men of genius prefer the reading a mere romance, to a hiſtory mixed with fables. At this time he compoſed ſeveral poems; and the houſe, where he reſided, having taken fire, he ruſhed into the midſt of the flames to ſave his verſes, and having carried them off, congratulated himſelf on the preſervation of what he then eſteemed his moſt valuable treaſures.

Philosophy, however, ſoon prevailed; and within the ſpace of one year only, after this event, his mind

mind had arrived at ſuch a ſtate of maturity, that he had the reſolution to condemn to the flames, the ſame poems, which he had ſaved, the preceding year, at the hazard of his life.

Among theſe poems were many ſatires; a ſpecies of compoſition for which M. de Haller had already ſhewn conſiderable talents. This ſacrifice, therefore, not only evinced his modeſty, but the progreſs he had made in the knowledge of the human heart. He perceived, that a virtuous man ought rarely

to

to make uſe of this weapon, which puniſhes without correcting, and which ſeems improper to be employed, except againſt thoſe, whoſe rank or power protects them from every other puniſhment.

The time now arrived when our young ſtudent was to chuſe his ſituation; he wiſhed to inveſtigate nature, and he made choice of the only profeſſion, which would allow him to devote himſelf to that ſtudy without reſerve, viz. that of phyſic. It was not, indeed, the profeſſion, which would moſt certainly lead

to

to fortune and preferment in the ſtate; but it did not exclude him from them. Though the government of Berne have confined their offices to a certain number of families, yet they have not excepted againſt the uſeful and learned profeſſions. It was even probable, that the reſpect, which is generally acquired by enlarged knowledge and ſuperior talents, might prevent the neceſſity of his forming intrigues, to which others, who purſue the uſual routine of acquiring honours, are obliged to ſubmit.

Towards the end of the year 1723, he went to Tubingen, where he continued his ſtudies, with unremitted ardour, under Camerarius and Duvernoi, and gave public proofs of the progreſs he made under theſe profeſſors.

His travels commenced at the age of ſixteen, and the full liberty he enjoyed at ſuch an early period, might have been attended with danger, had it not been obviated by a ſingular circumſtance. The great concourſe of young men, who frequent the German univerſities,

ſities, are left too much to their own direction. Haller, having entered, with his fellow-ſtudents at Tubingen, into a party in a debauch, the exceſſes to which he was a witneſs, gave him a ſalutary diſguſt to them. From this moment, he renounced wine for ever, that he might be certain to avoid the abuſe of it; and in order to guard more infallibly from ſeduction, he thought himſelf obliged to obſerve a rigorous ſeverity in his manners.

Attracted by the diſtinguiſhed reputation of Boerhaave, he proceeded

ceeded to Leyden, where he arrived in May 1725. Here he met with every thing, that could be agreeable to a mind intent on the acquiſition of ſcience. And Boerhaave, who divided his time between his academical lectures and medical conſultations, ſhewed him all the regard, that was due to ſuch rare abilities and eminent merit. Here he found an anatomical theatre, well ſupplied with ſubjects; cabinets of natural hiſtory; a very extenſive library; and, in ſhort, every thing, which could encourage and invite to ſtudy. Albinus, though

a young man, had given proofs of his talents for anatomy; and the famous Ruyſch, the inventor of anatomical injections, was ſtill living at Amſterdam, where he continued his labours at the age of ninety. M. de Haller availed himſelf of all theſe advantages. But his health being impaired, he was obliged to take a journey, into lower Germany, in company with two of his friends. On his return to Leyden, he took the degree of Doctor in Phyſic. The Theſis which he compoſed on this occaſion, diſplayed the knowledge he

he had acquired in anatomy, and proclaimed him as an obſerver capable of enriching that ſcience with many important diſcoveries. The ſubject of it was the pretended diſcovery of a ſalivary duct by Cowitz, the falſity of which, Meſſrs. Duvernoi and Haller expoſed both by diſſections of brutes and human bodies.

In the year 1727 he went to England, where he was particularly connected with Sir Hans Sloane, who had, at that time, formed a very conſiderable collec-

tion of natural curioſities; and he had the pleaſure of becoming acquainted with Meſſrs. Plumtre, Cheſelden, and Douglas; men diſtinguiſhed throughout Europe, for their profeſſional abilities. Having viſited Oxford, from England he paſſed over to France, where he remained but a ſhort time. A body, which he was diſſecting at Paris, became offenſive to one of his neighbours, who informed againſt him. Knowing the ſeverity of the laws againſt thoſe who take up dead bodies, by an error, into which a ſtranger might eaſily fall, he imagined

imagined that they equally extended to the anatomiſt who diſſected thoſe bodies. He determined, therefore, to quit a country, where the reſearch after truth appeared to expoſe the inquirer to ſuch great danger.

From hence he went to Baſil, where he ſtudied mathematics, under John Bernoulli; a ſcience which would be uſeful to an anatomiſt, as expoſing to him the uncertainty of reaſoning on mechanical principles, with reſpect to medicine, and would be a proper preſervative

for a diſciple of Boerhaave, who, like his maſter, had been educated in the Carteſian philoſophy.

At Baſil alſo, he firſt began to ſtudy botany, to which he had hitherto profeſſed an averſion. But excited, as he himſelf tells us, by the genius of the place, where the celebrated Bauhine had reſided, and by the example of his friend M. Stahalin, he cultivated the ſcience with ſuch proſpect of ſucceſs, that he even began to lay the plan of the work he afterwards completed and publiſhed, under the title of *Enumeratio*

Enumeratio Methodica Stirpium Helvetiæ Indigenarum, &c. at a time when he declares, he ſcarcely knew the moſt common plants.*

* Ego vero, cum in prima juventute a plantis omnino fuiſſem alienior, redux ex itineribus, Germanico, Belgico, Britannico, & Gallico, nullâ ullibi ſtirpe conſervatâ, cum Baſileæ, ob audiendum Johannem Bernoullium et diſcenda mathemata, viverem, anno 1728, neſcio quo ardore incitatus, ferè genio loci quem Bauhini habitaverant, et tunc colebat Stahalinus, cepi plantâs legere, deſcribere, compilare, tanta cum ſpe ſucceſſûs, adhuc remotiſſimi, ut etiam tunc hoc, quod edo opus, moliri, quando vulgatiſſimas ſtirpes vix dum dignoſcebam.

Præfat. Enumerat.

M. DE HALLER returned to his own country, about the year 1730; he was then in his twenty-ſecond year. The ſciences being, at that time, leſs generally known and eſteemed than at preſent; ſo ſtrong an attachment to ſtudy, and ſo laborious a way of life, would appear ſingular in the eyes of his young friends, who paſſed too much of their time in idle purſuits; and he was expoſed to that raillery, which too often ſucceeds in repreſſing the firſt efforts of a young man, and ſtifling, in its birth, the noble ambition of acquiring diſtinction.

tinction. But he was too firmly attached to literature and philoſophy to be affected by ſuch ridicule, and he continued reſolute and ardent in his reſearches.

His taſte for poetry now alſo returned, or rather he became a poet a ſecond time; but ſuch as a philoſopher ought to be, who had been long occupied in profound ſtudies. His poems contained deſcriptions of nature, not ſuch as the poets have ſo frequently and uniformly painted her, ſuch as formerly deſcribed by Homer, and diſfigured

figured by his imitators; but nature in the dreſs in which Haller himſelf had obſerved her; when climbing up the rocks, and traverſing the eternal ice of the Alps, he endeavoured to diſcover her ſecret operations; poems in which he inveſtigated the depths of the moſt abſtract and inſoluble queſtions in mathematics and in morals; epiſtles in which he paints the ſweets of friendſhip and paſtoral life, the pleaſures attending on ſimplicity of manners, the ſoft and tranquil charms of virtue, and the happineſs enſuing from the ſacrifices, which the

the more ſtrong and auſtere virtues demand of us. Such are the poems of Haller. While he ridicules and reprobates the corruption of morals, he places hypocriſy in the moſt odious point of view: he ſings the benefits of religion, which teaches us to love and to bear with each other; and he exclaims againſt the crimes of intolerance, with that horror, which muſt be always ſtrongly felt by every virtuous mind, however ſincerely attached to particular modes of religion. We might almoſt ſuppoſe that we at once heard Fenelon celebrating the delights of divine

divine love, and the author of the Henriade thundering againſt fanaticiſm.

Mr. Haller had formed a friendſhip with his two countrymen, Mr. Stahalin, who was afterwards profeſſor at Baſil, and Mr. Geſner, profeſſor and canon at Zurich, whoſe character is as amiable, as his knowledge in phyſics is profound. He has recorded their friendſhip in his poems; and it is to their encouragement we are obliged for the firſt perfect fruits of his poetic genius.

His

His poems were ſoon tranſlated into French: the nations of Europe ſaw, with aſtoniſhment, the German poetry, which had been hitherto unknown, produce works of ſo capital a kind, as might even excite the jealouſy of nations, who for ſeveral years had diſputed, amongſt themſelves, the empire of letters.* Happy in her later birth, ſhe united, at her firſt outſet, that profound philoſophy, which diſ-

* His two philoſophical epiſtles, addreſſed to Mr. Stahalin, place Haller, in the opinion of ſome critics, on a level with the philoſophical poets of England.

tinguiſhes

tinguiſhes the more enlightened ages, and that richneſs of imagination, which was the happy attendant on the earlieſt æras of poetry. Perhaps, if we may be permitted to hazard the remark, the German literature owes that juſtice, which foreign nations have ſo readily rendered her, and Haller ſome part of his ſucceſs as a poet, to the reputation which he had acquired as a philoſopher. The literary world heard, with ſurprize, that the author of theſe delightful and amiable poems, was a phyſician, who paſſed his life in the midſt

midſt of diſſections, employed in ſearching out the moſt ſecret ſources of organization and life; and the learned ſaw, with pleaſure, that, in the few moments that M. de Haller could afford to dedicate to the Muſes, he had, by his merit, acquired a place among the firſt poets of his nation.

Some, perhaps too ſevere, critics have objected to his poems, as too cloſely imitating the oriental ſtile. This lofty and ſublime mode of writing, pleaſes in the original authors, becauſe it appears to be the

the natural expreſſion of the poet's ideas, ſtriking even by its ſingularity, and tranſporting us to the ages of ſtrong, but uncultivated nature, which afford us ſuch exquiſite delight whenever we recur to them. But pleaſing, as it may be in *them*, it often offends in the hands of imitators; for it ſhould ſeem that the moderns, who differ ſo much from the ancients in their manners and opinions, ſhould neither poſſeſs the ſame ideas, nor uſe the ſame method of communicating them; and we are induced to ſuſpect that theſe oriental imitations

tions are merely the effect of art, in the poet, who wiſhes to diſguiſe thoughts, which would otherwiſe appear trite and common, by pompous diction, and a peculiar turn of his periods. No one had ever leſs occaſion for ſuch an expedient than Haller, and this ſtile has rather ſerved to cover beauties in his poems, than conceal defects.

But the charms of poetry were not ſufficiently alluring to detach M. Haller from the more ſevere and uſeful ſtudies. He only cultivated the Muſes in his ſolitary

walks, in thoſe hours of the night, when ſleep forſook him, and during thoſe receſſes from labour, with which his ſtate of health ſometimes forced him to comply. At ſuch ſeaſons, his active diſpoſition impelled him to ſubject thoſe grand, pleaſing, and affecting ideas, which aroſe in his mind, to the laws of metre and the trammels of rhyme. His immenſe labours in anatomy, the attentive obſervation which different diſeaſes require, the neceſſary ſubſequent reflections, together with conſultations on a great variety of caſes, employed a large ſhare

of

of his time. Nor was he idle during thoſe hours which were not devoted to theſe duties. And though ſeparated from his maſters, his friends and his competitors, deprived of the aſſiſtances and encouragements to which he had been accuſtomed, his own private cabinet, and his ſelect library, ſupplied the place of academic aids.

Here he laid the foundations of that vaſt extent of knowledge, which comprehended every ſpecies of literature. The diſcoveries of every cultivated age and nation,

were extracted in the courſe of his reading, which he continued, with unremitting attention, during his whole life, without being diverted from it either by the viciſſitudes of fortune, or by any embarraſſment of his affairs. Poſſeſſed of a moſt happy memory, he had been early accuſtomed to arrange his knowledge with order, and ſtrictly to eſtimate its value. The great utility he received from his reading, and the wiſe application he made of it, have ſufficiently juſtified the avidity for inſtruction which appeared in his earlier years.

Though

Though his application to the ſtudy of botany was rendered more difficult to him by a natural defect in his eyes, being ſhort-ſighted, yet he was become ſo charmed with the ſcience, that in the years 1730 and 1736, he made ſeveral botanical excurſions. In theſe he viſited the higheſt mountains of Jura and the Alps, aſcending their rugged ſummits, and forcing his way as far as the Glaciers, though the paſſage was always attended with fatigue, and, often, with eminent danger.

He afterwards travelled through the marſhes, and, alſo, through the more temperate and cheerful parts of Switzerland, where the vineyards diſplay their riches, and adorn the plains. In theſe excurſions, he had the pleaſure to find, within the limits of his own country, and make a complete collection of, not only the plants which grow in the frozen climate of Norway, but alſo thoſe that are the product of the ſofter regions of Italy.—Nor was botany the only object of his purſuits in theſe excurſions. His knowledge was equally

equally extended to mineralogy, zoology, and to all the other branches of natural hiſtory.

HALLER's diſtinguiſhed abilities, joined with his many amiable virtues, procured him general eſteem and regard, and raiſed him protectors and friends, whoſe affection was highly uſeful to his future fortune. In 1734, the republic of Berne eſtabliſhed a public amphitheatre, where he taught anatomy. Notwithſtanding his youth, he was appointed phyſician to an hoſpital; and was alſo entruſted with the care of arranging the pub-

lic library and the cabinet of medals. In the firſt year that he undertook this office, he formed a regular catalogue of all the books, and examined, and placed, in their chronological order, five thouſand antique medals.

He was, however, called to quit his country. George II. king of Great Britain, and elector of Hanover, being deſirous of promoting the proſperity of the univerſity of Gottingen, invited M. de Haller, and eſtabliſhed there for him an anatomical, botanical, and ſurgical profeſſorſhip.

feſſorſhip. Though his name had not hitherto been affixed to any great profeſſional work, the diſſertations he had publiſhed, had announced him to anatomiſts, as a man of ſuperior qualifications. Thoſe, who were then at the head of the profeſſion, diſcerned in him that knowledge which might *one day* raiſe him to the *firſt* rank, but which did not, *as yet*, entitle him to diſpute *that* which they poſſeſſed. He was arrived at that happy degree of reputation, which, in a man of learning, attracts the eſteem, without exciting the jealouſy of his

his cotemporaries. He accepted the invitation of the king of Great Britain: it was at the expence of abandoning his native country; of renouncing the title, or rather the enjoyment of the rights, of a free citizen; and of tearing from her family and country, a young wife, whoſe perſonal qualities had captivated his heart, who had borne him three children, and who, by the ſweetneſs of manners, with which ſhe adopted his taſte and purſuits, formed the principal happineſs of his life. But the ſacrifice was neceſſary: at Berne he could

could not hope for ſuch immediate advantages to ſecure the fortune of his children. His youth would prevent him, for a long time, from obtaining any places of conſequence, which he might hope to enjoy, in the government. He perceived that it was ſtill remembered, that he had ſhewn a talent for ſatiric poetry; and though he had burnt his ſatires, they were not forgotten by his enemies and rivals. It was ſufficient that he was known to poſſeſs this turn, to give umbrage in an ariſtocracy. So great is the dread of ſatire in thoſe conſtitutions, where

where the great ſtrength of government depends on the opinion which the citizens entertain of its wiſdom; where the chiefs have no other aſſurance of reigning unmoleſted, but by concealing from the people, that they are their maſters, and perſuading them that they are mere magiſtrates. Beſides, theſe chiefs, who, almoſt always, have the prudence to affect a modeſty, which ſecures their power by rendering it leſs odious, being diſtinguiſhed from the citizens by their prerogatives, but on a level with them in private life, poſſeſs neither

neither titles nor pomp, nor external reſpect; which, though they may not preſerve the grand monarchies from *feeling* the laſhes of ridicule, at leaſt prevent their being greatly *humbled* by them.

M. DE HALLER was aware, that by renouncing his country for ſome time, and by accepting an office which aſſured to him the fortune of his family, gave him full liberty to purſue his ſtudies, and afforded him many opportunities of increaſing his experiments and diſcoveries, he ſhould only leave it to become more

more capable of ſerving it, contributing to its glory, and returning to it, at ſome future period, more uſeful and more conſiderable. The difficulty of obtaining bodies for diſſection at Berne, might be another reaſon for inducing him to leave it. The hiſtory of the interruptions which anatomiſts have experienced in this reſpect, from the time of Hippocrates to the preſent day, is not one of the ſmalleſt proofs of the ſingular inconſiſtency of man, who, with all his deſire for health, neglects, with ſuch indifference, the means of obtaining

obtaining it, and even oppoſes to it the greateſt obſtacles; as if mankind, miſled by perſons intereſted to prolong their ignorance and misfortunes, were combined with them in a conſpiracy againſt their common intereſts.

HAVING fixed his reſolution, and arranged his affairs, he bade adieu to his country and friends, and ſet out on his journey to Gottingen. The infirm ſtate of his health, and the difficulty of conveying ſuch young children, in a ſtrange and remote country, rendered their travelling

travelling very troubleſome and fatiguing; and it terminated in, what moſt ſenſibly affected his heart, the loſs of his dear Marianne, who died, at the inſtant of their arrival, of the conſequence of ſome injury ſhe received by the overturning of the carriage.

M. HALLER entered on his new employments in a very dejected ſtate of mind; and he experienced the want of that conſolation which his relations and friends might have afforded him. In the vigour of life, the application of the mental

faculties

faculties to ſome intereſting object, affords the moſt certain means of weakening the impreſſions of grief. His efforts to divert his thoughts by labour, were favoured by very encouraging circumſtances. The eſteem of his colleagues, increaſed in proportion, as his talents and qualifications became more known. And the regency of Hanover gave him a ſenſible proof of their approbation, by inviting to Gottingen one of his friends, the learned Mr. Huber of Baſil, to aſſiſt him in his firſt eſſays.

THE taſk of teaching a ſcience, in all its parts, to a claſs of ſcholars at an univerſity, ſhould ſeem ſufficient to employ the whole time, that ſociety has a right to expect the moſt laborious man to ſacrifiſe. The objects of medicine include the deareſt intereſts of man, his health and exiſtence. In this ſcience, uncertainty is never indifferent, and error always dangerous, in its conſequences. The art is founded on an intimate knowledge of the organization of the human body; a ſtructure, the harmony and proportions of which, though

though moſt wiſely and accurately formed, are liable to be deranged by innumerable accidents. The means of reſtoring health are exceedingly multiplied, and the ſelection of remedies as delicate as important. To this ſcience a variety of other knowledge is requiſite; and each ſpecies opens an extenſive field for inquiry. Every day produces new diſcoveries, which it is neceſſary a Profeſſor ſhould not only be acquainted with, but examine and explain. Beſides public lectures, private inſtructions are to be given to his pupils.

The ſlothful are to be ſtimulated, the diligent encouraged, thoſe who are ſlow of underſtanding, to be more particularly and patiently informed; and thoſe of brilliant and quick parts, reſtrained from deviating from the ſimple paths of nature, and wandering too far into the labyrinths of ſpeculative hypotheſis. To effect theſe purpoſes requires much time, labour, and application.

NOTWITHSTANDING theſe important employments, the ſeventeen years which M. Haller ſpent at Gottingen,

Gottingen, were thoſe, in which he executed his great undertakings; and during this period, his ſuperior literary reputation was acquired. The detail of all his reſearches, nay, the mere liſt of his works would exceed our preſent bounds; and it will be neceſſary to paſs over ſeveral, which would have been highly ornamental and honourable to any other author, and to confine ourſelves to thoſe great works which muſt certainly immortaliſe the name of Haller.

He ſelected Phyſiology as the principal object of his ſtudies; a

branch of medicine, which, penetrating into the intimate ſtructure of the various parts of the body, inquires into the laws by which man is formed, developed, grows, lives, re-produces his ſpecies, decays, and dies; in what manner each organ performs its proper motions, and regulates the offices to which it is deſtined; by what means the organs, whoſe neceſſary functions continually tend to their own deſtruction, are capable of being repaired by nouriſhment and ſleep; by what mechaniſm, a power, the principle of which is unknown

to

to us, ſometimes executes, at the command of the will, actions that are neceſſary to the preſervation and proſperity of man, and at other times produces, independently of the will, operations which are eſſential to his exiſtence. Phyſiology alſo inveſtigates the mode in which the changes in theſe organs, at one time, are the cauſe, and at another, the effect, of diſorders in the vital functions; what connection exiſts between the alterations in theſe functions, and the diſeaſes of the parts which execute them; and, laſtly, in what manner,

remedies of every kind, by their action on theſe organs, poſſeſs the power of re-eſtabliſhing order in the animal œconomy.

M. DE HALLER was not uninformed, that this Science, having been long devoted to the ſpirit of ſyſtem, had become ſuſpicious to philoſophical phyſicians; but theſe objections were what he propoſed to obviate. He entertained the hope of rendering Phyſiology as certain as any other phyſical ſcience: a ſcience by which philoſophers might learn the knowledge of

of man, and where phyſicians might find a baſis on which they might ſupport their practice.

To this end, it was neceſſary to endeavour to eſtabliſh Phyſiology on an exact anatomy of man and of other animals; by the latter of which ſo many diſcoveries have been made concerning the animal œconomy of our own ſpecies, which had not been revealed by the ſtudy of the human body. It was neceſſary to baniſh, from Phyſiology, both that metaphyſical jargon, which has long ſerved, in all

all the ſciences, to cover real ignorance under ſcientific words, and thoſe theories, whether mathematical or chemical, which have been rejected even by mathematicians and chemiſts; and are conſtantly made uſe of with ſo much more confidence, or adopted with greater reſpect, in proportion as the maſters or ſcholars are more completely ignorant of the foundations on which they have been erected. It was neceſſary to ſubſtitute to all theſe ſyſtems, general facts, eſtabliſhed by obſervation and experiment; to poſſeſs ſagacity to lay hold of theſe facts; to conſent to confeſs ignorance

rance of their cauſes, and to acknowledge, that, in all the ſciences, there are bounds beyond which it is doubtful whether the human mind will ever be able to penetrate, but which it, aſſuredly, cannot paſs, but by the aſſiſtance of time and a long courſe of labour.

SUCH was the plan which our Profeſſor had formed; and he purſued it with that activity and ſucceſs, which he has exhibited in his other works, as an accurate and profound NATURAL PHILOSOPHER. He was ſo truly original in Phyſiology, that,

that, even in his life time, his cotemporaries and rivals placed him in the firſt rank of claſſic authors.

But it was not till after he had examined, in a numerous ſuite of memoirs, the important and difficult queſtions concerning reſpiration, the circulation of the blood, generation, and the formation of the bones, that he thought himſelf qualified to comprehend Phyſiology in its full extent: and even then his firſt edition bore the modeſt title of a mere eſſay. Nor was it till after thirty years of labour and immenſe

menſe reſearches, that he thought himſelf juſtified in beſtowing on his work the title it merited.

In this work all the parts of the human body are deſcribed; we have there an opportunity of examining the opinions which have been recommended, or at leaſt advanced, by celebrated authors, who have attributed different uſes to the ſame parts. M. de Haller did not always decide between theſe opinions; ſometimes he proved that they ought all to be rejected. Nothing of importance that had been

been previouſly publiſhed, eſcaped his obſervation, and he almoſt uniformly added remarks of his own to the intelligence he had obtained from books.

We ſhall not here enter into the immenſe detail of errors which Haller has deſtroyed in Phyſiology; of new facts which he has added; of the ingenious and deep views which he has opened; of the doubts he has cleared up, or of the theories he has perfected or reformed: this would be to copy the whole of his work. We ſhall confine ourſelves chiefly

chiefly to thoſe ſubjects, on which he has drawn every thing from his own proper fountain, viz. Generation, the Formation of the Bones, and Irritability.

His numerous experiments which have generation for their object were made on birds. The facility of examining their eggs, at almoſt all hours of their incubation, preſented him with advantages which he could not have found, had he made his inquiries on any other kind of animals. He traced the formation of the chicken, from the inſtant

inſtant in which the firſt change in the egg is perceived, and the vital ſpeck begins to dilate, to that when the little animal quits the ſhell in which it has been formed. He ſaw, if we may uſe the expreſſion, the organs ſucceſſively ſpring up before his eyes, acquire life and motion; ſaw them transformed and perfected; aſſume the ſeveral diſpoſitions allotted to them in the animal; and beheld the arteries and veins unfold themſelves. The veſſels of the growing chicken are confuſed and form a continuity with

with thoſe of the yolk of the egg; and as theſe veſſels of the yolk are obſervable in eggs which are unimpregnated, M. de Haller thought himſelf warranted to conclude that the chicken exiſted ready formed in the egg, previous to its impregnation. He was equally aſſured that the fœtus is alſo wholly formed in the females of oviparous animals; and he regarded this obſervation as a concluſive proof in favour of the ſyſtem of the ſucceſſive developement of germs. He however, perhaps, regarded it as a mere probability; and would not

have diveſted himſelf of that wiſdom which rendered him inacceſſible to the ſpirit of ſyſtem, if he had not been inſpired with a ſecret propenſity to this opinion, by reaſons of a different kind.

He apprehended that the production of an animal, by means purely mechanical, would deſtroy one of the proofs of the doctrine of providence. But is it not ſufficient for thoſe who ſearch, in nature, for proofs of this doctrine, that the phenomena are regulated by certain laws, whatever theſe laws may be? Is

Is not the cryſtalliſation of a ſalt, which conſtantly aſſumes the ſame form, a phenomenon as admirable as that of the generation of animals? In ſhort, the laws which act upon matter, being equally conſtant, and the phenomena reſulting from them uniformly offering the ſame regularity, whatever ſyſtem we employ to explain them, is it not in the wiſdom and goodneſs which the whole of theſe phenomena announce, and not in the nature of the powers they produce, that we ought to look for proofs of the exiſtence of a ſuperior being?

It may appear more ſingular that M. de Haller ſhould believe religion or morality to be intereſted in the opinions of philoſophers, concerning the formation of organiſed beings, as he had attacked, in his diſſertation on monſters, the identical metaphyſical reaſonings, which he has ſince employed in favour of the developement of germs; and he himſelf had proved, as we ſhall preſently relate, that the repoſe of a philoſopher may be diſturbed by theſe trivial charges, which are often too wantonly made and eaſily admitted.

In

In the experiments on Offification, M. de Haller traces the progreſs of the growth and ſolidity of the bones in oviparous animals. He then examines the formation of a callus in the bones of adult animals. He thought he had diſcovered, in his experiments, that the bones are, at firſt, a jelly of a thin conſiſtence, but organiſed and formed of veſſels, originally imperceptible to the ſight, as being tranſparent and filled with a colourleſs liquid. This jelly afterwards aſſumes a more ſolid form: the veſſels become viſible, and it at laſt offifies, by the

blood of the arteries, which paſs through it, depoſiting in it an earthy matter. According to his opinion, the perioſteum contributes nothing to oſſification, becauſe it has a different organiſation from that of the bones; becauſe ſome bones have no perioſteum, and this membrane is covered by calluſſes or oſſeous productions; and laſtly, becauſe in a fœtus, the bones, at the time they become ſolid, have no adheſion to the perioſteum.

These opinions of Haller differ from thoſe of Duhamel, who explains

plains the formation of the bones by ſuppoſing a ſucceſſive oſſification of the membranes of the perioſteum. Indeed ſome of M. de Haller's experiments would appear difficult of explanation, if we were to adopt the theory of M. Duhamel. Nor is it leſs difficult to account, on Haller's ſyſtem, for the formation of bony lamina, and eſpecially for the alternate red and white ſtrata, which are obſerved in the bones of animals fed, ſometimes with their common food, and ſometimes with the ſame food mixed with madder; ſo that theſe two

opinions, both of which are founded on experiments, and advanced by philoſophers diſtinguiſhed for their averſion to ſyſtematic ideas, have divided, and ſtill continue to divide, phyſiologiſts.

By irritability, M. de Haller means, that property, which certain parts of living bodies poſſeſs, of contracting when wounded, or even when touched, independent of the will of the animal that is the ſubject of the experiment, and without its feeling any pain. A property, which plants ſeem alſo to

to partake, and which being diſtinct from ſenſibility, does not depend on the ſame organs. He endeavours to prove, that irritability reſides excluſively in the muſcular fibres, and ſenſibility in the nerves: he demonſtrates how, in the different parts of the body, almoſt all of which are mixed with muſcles and nerves, the ſenſibility, they ſhew, depends on the nerves, and their irritability on the muſcles; that thoſe parts which are deſtitute of muſcles are not irritable, and thoſe that are deſtitute of nerves are not ſenſible; that if the nerves be divided,

divided, which unite any part to the brain, the ſenſibility of the part will be loſt, while its irritability will remain. The nerve, when ſeparated from the brain, ceaſes to contract; it only preſerves an appearance of motion, becauſe it may ſerve as a foreign body to excite irritability in the muſcle to which it belongs. On the contrary, a muſcle, though ſeparated from the living body, ſtill retains ſigns of irritability; but the power of it is diminiſhed, and ceaſes in a very ſhort time. He cautions againſt confounding irritability with elaſticity,

ticity, which is a property purely mechanical, and teaches to diſtinguiſh the motions which irritability produces, from thoſe merely chemical changes which the application of cauſtics induces in all the ſoft parts of organiſed bodies.

The work in which M. Haller publiſhed theſe diſcoveries, formed the æra of a revolution in anatomy. It taught us that there exiſts in the living body a particular power, which may be regarded as the immediate principle of motion, as a quality diffuſed through the organs, which

which enables them all to perform their reſpective functions. And his diſciples boaſted that Phyſiology, which had too long been built on metaphyſical and uncertain ideas, might now be erected on the baſis of general fact, and verified by experiment.

The publication of this theory was, however, productive of much controverſy. M. Haller defended his opinions with ability and candour. And if we do not ſubſcribe implicitly to his doctrines, we muſt at leaſt admire the temper with which he conducted the diſpute.

But

But though the difference in opinion of other anatomiſts, gave him no uneaſineſs, theſe diſcoveries, relative to irritability, were the occaſion of very poignant chagrin to their author. On this property of animated matter, Lametrie laid the foundation of a ſyſtem of materialiſm; and he pleaſed himſelf in dedicating his book to Haller, and declaring that to him he owed the acquiſition of the great truths which it contained. M. de Haller was ſincerely attached to religion, from his infancy: he conſidered Lametrie's jocularity as a ſerious inſult;

inſult; and obſerved, with horror, that he was held up to Europe, as a favourer of materialiſm, or, at leaſt, as the inventor of principles which ſerved as a baſis for that doctrine. Neither the reſpect which he had conſtantly declared for Chriſtianity, in all his works, nor his mode of life, ſo conformable to the precepts of the Goſpel, ſeemed ſufficient to ſecure him againſt this imputation. He complained of it bitterly. Lametrie, in his anſwer, aſſumed the ſame tone: and Haller had prepared to publiſh a very long and ſerious refutation

futation of the charge, when he was informed of the death of his antagoniſt, and diſcovered, that, deceived by an exceſs of delicacy, which was doubtleſs laudable, he, alone, had been made the dupe of Lametrie's irony.

His humanity muſt have ſuffered in making experiments which could not be conducted without ſubjecting a great number of animals to moſt excruciating pains. This would have been purchaſing an *uſeleſs* fact at too great a price. Haller perceived it. The compaſſion he felt for

for the victims of his researches, is often apparent in the narrative of his experiments. We behold him, impressed with a kind of remorse; and omitting no occasion of expatiating on the utility which may be derived from them to mankind. He even seems desirous to believe that these animals suffer no pain, and unwilling to renounce the opinion of Descartes. He was convinced that an idle inquisitiveness, or a passion for reputation, could not justify our killing sensible beings in torments: and that whatever reason we may have to

regard

regard them as formed for our uſe, it is abſurd and cruel to imagine, that they are deſigned alſo to be the ſport of our curioſity or vanity.

HAVING undertaken to teach botany at Gottingen, Haller formed a catalogue of the plants in the garden of that city, and in this he principally explained his own ſyſtem of botany. Linnæus had choſen the characters derived from the number of the ſexual parts of plants as the foundation of *his* ſyſtem; M. de Juſſieu ſeemed to prefer thoſe diſtinctions which are

formed on the *ſituation* of thoſe parts: M. de Haller made choice of the mutual relation ſubſiſting between the number of ſtamina and that of the petals, and in the monopetalous plants, between the number of ſtamina and the diviſions of the calix, as the baſis of a new ſyſtem. This mode appeared to him more conſtant than that depending on the abſolute number of the ſame parts, and alſo afforded a greater variety of diviſions than could be deduced from their reſpective poſition. But he did not confine nor ſubject himſelf to a rigorous

gorous purſuit of his ſyſtem. Thoſe of Tournefort, Linnæus and Juſſieu, often ſupplied him with diviſions. Perſuaded of the neceſſity of diſcovering a natural mode of arranging plants, and diſregarding ſyſtems, any further than as they are the means of rendering the ſtudy of botany leſs difficult; he conſidered facility as the firſt object of an artificial ſyſtem, and to this he thought it proper to ſacrifice both the merit of regularity and uniformity. Few botaniſts have adopted his ſyſtem; but in his deſcription of the plants, which

he had obſerved on the ſummits of the Alps, the accuracy and beautiful execution of the plates which adorn the work, the deep knowledge of the author, and eſpecially the indefatigable patience, the activity and courage which enabled him to ſurmount the many difficulties and dangers of ſuch an enterpriſe, are univerſally admired.

THESE were Haller's principal works as a philoſopher; but we have not hitherto related all the obligations which the ſciences have received

received from this illuſtrious man. In reading a multitude of books, on all the various branches of phyſic, he was aware that he ſhould have avoided much trouble and diſguſt, if he could have procured a kind of catalogue containing at once a comprehenſive liſt of books, an accurate account of their objects, the new information they contained, and alſo an opinion of the degree of confidence which the author or his works might deſerve. He was deſirous of preventing others from ſuffering the uſeleſs trouble he had been obliged to undergo, and he

formed the project of four bibliothecas, viz. of anatomy, botany, ſurgery, and the practice of medicine. He publiſhed his firſt eſſay of this kind in a commentary on the method of ſtudying Boerhaave's ſyſtem of medicine. In this, in order to ſpare his readers the tediouſneſs of a long liſt of opinions on a great number of authors, in which it would have been difficult to have avoided either a ſameneſs or affectation, he contrived to diſtinguiſh the proportionate merit of theſe authors by a greater or ſmaller number of aſteriſks;

aſteriſks; and in this liſt he comprehended even living writers. We may reaſonably ſuppoſe that very few of theſe learned men were content with the *number* of their aſteriſks; though we cannot pretend to ſay how far this freedom of Haller increaſed the liſt of his enemies and critics. But it is requiſite that a man, who undertakes to decide on the merits or demerits of his cotemporaries, and is, at the ſame time, incapable of flattering them, ſhould poſſeſs a very uncommon degree of worth, to entitle him to an uncontroverted

ſuperiority of literary character; and if ever the general reputation of a man of knowledge, is an inconteſtible proof of eminent talents, it muſt certainly be, in a caſe like this, in which ſo many perſons are intereſted in leſſening the authority of his deciſions. M. de Haller hazarded, at this time, his importance and his repoſe. He was ſenſible of the riſk, but he did not heſitate. In delivering theſe opinions, his end was to determine what guides ſhould be choſen by young men who deſign to enter into a profeſſion, in which the

the lives of their fellow creatures are intruſted to their care; and he eſteemed this to be one of thoſe circumſtances, in which the reſolution to expoſe ourſelves to that hatred, which is often excited by the wounds given to ſelf-love, may deſerve to be conſidered as a virtue.

In order to compoſe theſe four bibliothecas, it was neceſſary not only to form extracts of every thing that was uſeful in the books he had read, but that he ſhould alſo give in a few words the ſubſtance, character and merit of the ſeveral

ſeveral works. This talent implies in the critic not only a mind equally correct and regular, but alſo the art of expreſſing his opinions with propriety and conciſeneſs.

A REVIEW of new publications had been for ſome time carried on at Gottingen, by a few private perſons. It appeared, to M. de Haller, of ſufficient conſequence to merit the attention of ſuperior conductors; and, under his auſpices, and with his aſſiſtance, the execution of it was undertaken by the members of the ſociety. A work

work of this kind, when performed with judgment, fidelity, and impartiality, by men poſſeſſed of proper learning, ingenuity, and diligence, muſt certainly be highly uſeful to literature, as well as to thoſe who thus exerciſe their critical abilities. In examining the opinions of others, our own judgment is improved; we acquire deeper views, and a more perfect knowledge of the ſubjects in diſcuſſion, or behold things appearing in a new form and different point of view. Often from the ſmalleſt ſpark, the moſt brilliant light is produced,

produced, and we are enabled to make diſcoveries which might otherwiſe have remained in perpetual obſcurity. The merit of this performance depended greatly on the part Haller took in it. In the whole circle of medical ſcience, in natural hiſtory, phyſics, chemiſtry, metallurgy, and œconomics, he undertook to review the different articles, and executed the taſk in ſuch a manner, that if his original works had not already evinced the amazing extent of his erudition, it would have been fully diſplayed in this literary journal.

He

He excelled, more particularly, as a reviewer of two kinds of writing. The firſt comprehended accounts of travels and voyages into remote countries, including deſcriptions of climates and ſoils very different from our own, and of the genius, diſpoſition and manners of the people. For, partly, his various and extenſive reading, and partly, his univerſal knowledge of ſcience, rendered him a moſt competent judge of the truth or falſehood of theſe narratives; and enabled him to illuſtrate many paſſages, eſpecially thoſe relative to natural

natural hiſtory. The other claſs conſiſted of collections of memoirs, on different ſubjects, ſuch as the tranſactions of the various academies and ſocieties for the promotion of literature and philoſophy. In his criticiſms on theſe papers he delivered his judgment in ſo ſuperior a manner, that the reader muſt immediately perceive him to be a complete maſter of every ſubject he inveſtigated.

His criticiſms on hiſtorical writings were alſo important and judicious. He was particularly converſant

verſant with the French and Engliſh hiſtorians, and ſeverely cenſured the levity which pervades the writings of the former. He was ſo intimately acquainted with the conſtitution and government of Great Britain, its hiſtory and laws, that few of its inhabitants poſſeſs a more accurate knowledge of thoſe ſubjects. His loyalty to the king, and attachment to the royal family, and indeed his partiality in favour of the Britiſh nation, in general, were frequently evinced in his ſtrictures on modern hiſtorians.

NOR was his attention confined to the more important concerns of literature. So verſatile was his application, that he even condeſcended to read and criticiſe romances, and other frivolous publications, which, at firſt ſight, might appear unworthy his attention; but ſerved, perhaps, eſpecially in his more advanced years, to amuſe and relax his mind, after the fatigue of more arduous ſtudies. He alſo procured tranſlations, into the German language, of the beſt foreign books, and embelliſhed them by prefaces, which were, frequently, elaborate

elaborate and replete with inſtruction.

M. DE HALLER poſſeſſed a true friend, and powerful protector, in Baron de Munchauſen, prime miniſter in the electorate of Hanover, who even prevented his wiſhes. An affection for the ſciences, was the foundation of their mutual friendſhip; and from thence reſulted the attention they paid to the improvement and welfare of the univerſity of Gottingen. Though ſenſible that great diſcoveries generally proceed from genius alone,

Haller was convinced that learned ſocieties, and eſtabliſhments for public inſtruction, elucidate, diffuſe and perfect theſe diſcoveries.

He availed himſelf of his credit with the king of Great Britain, to procure ſuch uſeful inſtitutions for the univerſity over which he preſided. Amongſt theſe was a ſchool for ſurgery; an academy of ſciences; a hoſpital for lying-in-women, in which the art of midwifery is taught; a collection of anatomical preparations; and a ſchool for deſign, where the pupils were

were inſtructed to delineate, with preciſion and truth, all the objects of natural hiſtory. This laſt inſtitution is hitherto the only one of its kind; whereas, academies of painting are very numerous.

By this means however, there is a certainty of procuring deſigners who will be uſeful to the progreſs of ſcience; whereas it may doubted whether the ſchools of painting contribute to form great painters. The object of Haller's deſign, though leſs brilliant, was certain in its effects; an advantage which

the eſtabliſhments for the promotion of the ſciences ſeem to poſſeſs, in general, over thoſe of the arts of imagination. In the ſciences, founded on obſervation and calculation, the more we increaſe the number of cultivators, the more we contribute to the progreſs of thoſe ſciences; becauſe their gradual progreſs muſt reſult from the combined labours of ſeveral perſons. On the contrary, the arts depending on the imagination, where every production is neceſſarily the fruit of the labour of one individual, ought to be cultivated

vated only by thoſe whoſe genius is capable of great productions.

THOSE ſciences which are not only uſeful, but even neceſſary, cannot be too much elucidated; becauſe it is requiſite that every practitioner ſhould be thoroughly informed. In the arts of fancy, every thing is uſeleſs that is not new or brilliant; and a multiplicity of *moderate* performances, inſtead of forming, corrupt the public taſte. In the ſciences, a methodical and regular mode of teaching is of certain utility; we have only

to produce a train of facts and truths, and to prove them by calculation or experiment. Every man may be a maſter, who, to a juſt underſtanding, unites extenſive knowledge; and the more extenſive his talents and information, the more capable will he be of performing his office. In the imitative arts, on the contrary, the only uſeful kind of ſtudy, is that of the moſt diſtinguiſhed models; and every pupil ſhould perhaps take leſſons from a maſter of his own choice.

By

By Haller's ſolicitation, the regency of Gottingen was prevailed on to build a reformed church for the uſe of the profeſſors and ſtudents of the proteſtant perſuaſion, and he undertook the care of ſuperintending the erection of the edifice.

The intereſt which he felt in promoting the knowledge of natural hiſtory, induced him to join, with other literary men, in a project for ſending Mr. Mylius to travel in America, for the purpoſe of making obſervations and col-

lections. This uſeful deſign was patroniſed by ſeveral princes, and though it was firſt deferred by the levity, and afterwards totally defeated by the death of this ingenious young man, M. de Haller muſt be allowed conſiderable merit in having zealouſly ſupported a ſcheme, which has been ſince put in execution with ſo much ſucceſs.

The numerous ſervices he had performed to the city of Gottingen, merited the rewards of his ſovereign, who beheld his projects for rendering

rendering that place flouriſhing and populous, ſucceed beyond his hopes. His Britannic Majeſty procured for M. Haller, the rank of a noble of the empire, from the imperial chancellor; but though he was created a baron, and has been generally diſtinguiſhed by that title, he always declined it. Such an honour might have been an advantage to his family, if it had remained at Gottingen, but would have been deſpiſed as a badge of vanity, and conſidered as an odious diſtinction in Switzerland, where, inſtead of ſuch nobility

bility as is to be met with in monarchial governments, the powerful families have acquired hereditary prerogatives, of more intrinſic value.

DURING his reſidence at Gottingen, he enjoyed every advantage he could deſire; the public regard, the eſteem of learned foreigners, the ſucceſs of his eſtabliſhment for the ſciences, the pleaſure of making uſeful diſcoveries, and the high reputation which his works deſerved: but domeſtic misfortunes imbittered his life. It has been already

already obſerved that his firſt wife died ſoon after his arrival at Gottingen. In a very elegant poem, entitled Doris, he expreſſed the moſt tender attachment, and deſcribed, with all the energy of a heart deeply impreſſed, his ſincere grief for the death of this amiable woman. Two years after he eſpouſed a ſecond wife, who died in a few months after marriage; and he has celebrated her memory in another monody. His conſoling himſelf ſo ſoon after the deceaſe of his firſt wife, had rendered him leſs an object of compaſſion with many, who

who might think to promote an opinion of their *own* ſenſibility, by degrading *his:* but perhaps M. Haller was not at all inferior in delicacy to thoſe who ſo ſeverely condemned him. A third marriage which he contracted, proved more fortunate, but ſubjected him to freſh cenſure. It ſhould ſeem as if he would have been more pardonable in the eyes of theſe declaimers, if he had taken three miſtreſſes, than married three wives. It is not ſurpriſing that his conduct ſhould be more ſeverely ſcrutinized than that of other men: but

but why ſhould he have been envied the tranquil and innocent pleaſures of domeſtic life, when his auſterity and ardour for ſtudy had deprived him of all other modes of diſſipation? Should we not conſider how much would have been loſt to the ſciences, if Haller had remained inconſolable for his loſſes?

Few men of learning have received ſo many marks of conſideration from their cotemporaries as M. Haller. He was invited to Oxford upon the death of the famous Dillenius, who had expreſſed a wiſh upon

upon his death-bed, that Haller might ſucceed him. When Albinus was nominated one of the deputies to the ſtates general, his place at Utrecht was offered to Haller; and the king of Pruſſia alſo propoſed to him an eſtabliſhment at Berlin, on his own conditions.

He reſiſted all theſe ſolicitations. The love of his country had been ever prevalent in his mind, and, ſtrange as it may appear to thoſe who are unacquainted with that patriotic ſpirit, which influences a Swiſs to prefer a moderate, but independant

dependant ſituation to great titles and the parade of riches, the more obſcure diſtinctions of his native country were more acceptable to him than the brilliant offers of foreign honours. His bad ſtate of health was an additional motive. He had been ſubject to inflammatory diſorders, the diſpoſition to which had been increaſed by ſtudy and cloſe application, and he found the moiſt atmoſphere of Gottingen prejudicial to him. The too great tenſion of his nerves daily increaſed their ſenſibility, and he alſo became

came nearly deprived of the uſe of one of his hands.

After an abſence of ſeventeen years, he returned home in the year 1753. His departure from it had produced the effect which might be expected. The ſame man, who was beheld with a kind of terror when preſent, was no ſooner gone, but he was regarded as the honour and glory of his country. On a viſit which he made to Berne in the year 1745, he was elected a member of the ſovereign council; a title which enabled him

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to fill ſeveral places in the government. One of theſe fell to him by lot in 1753. This, which is the manner of electing magiſtrates at Berne, may, at firſt ſight, appear ſingular; but when it is conſidered, that it only decides between men who have already been choſen, as qualified for the office, by the voice of their fellow citizens, perhaps it may be attended with fewer inconveniences, than thoſe elections where influence and canvaſſing are neceſſary. The advocates for this mode of election argue, that it is one of the moſt important con-

ſiderations in a political conſtitution, not to expect, from individuals, a more than ordinary degree of virtue, and even to ſuppoſe them liable to be ſeduced by the general vices of mankind. We ought not, therefore, to ſuppoſe, ſay they, that in giving their ſuffrages to fill up a particular department in the magiſtracy, the majority of citizens ſhould ſacrifiſe their particular views, or thoſe of their family or friends, to the intereſt of their country; and it may be leſs dangerous to truſt to chance, than to the deciſions of ambition and intrigue.

trigue. But it may be urged on the other hand, that it is not probable that the bulk of the electors ſhould be ſo egregiouſly corrupt, or be ſo miſled by intereſted or ambitious views, as to ſacrifiſe their real welfare, and be induced, in chuſing the members who conſtitute their ſenate, to give the preference to men deficient in principle or abilities. Were it not better, therefore, to rely on the honeſty of the people, than abandon a matter of ſuch high importance to the blind deciſion of fortune?

We come now to view M. de Haller in a new ſtation, in which it has been generally ſuppoſed that a man devoted to ſtudy can never hope to ſucceed. It muſt be unneceſſary to confute this opinion in an age which has produced ſo many inſtances in contradiction to it. There are certain parts of government naturally ſo connected with philoſophical knowledge, as, perhaps, only to be ſucceſsfully conducted by men who have made ſome progreſs in the ſciences. The government of Berne had therefore reaſon to congratulate themſelves

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on the acquiſition of a member ſo profoundly ſkilled in many branches of natural philoſophy; and he was accordingly employed in thoſe departments where ſuch qualifications were requiſite.

The adminiſtration of the ſalt works was brought to perfection by Haller, not, as might be imagined, by increaſing the revenue ariſing from them, but by rendering the works leſs burthenſome to the public. By leſſening the price of ſalt, he promoted the intereſts of the people, and he paid

a ſtrict attention to their health, by neglecting no means of rendering this neceſſary article more pure and free from adulteration. He diligently attended to the eſtabliſhment of an hoſpital for orphans, where they might receive ſuch ſound education, as would render them uſeful members to the ſtate, regulated with a ſtrict œconomy, ſuited to the circumſtances of a government, which, not having the power of increaſing its revenues by taxes, is in that happy ſtate of impotence to admit of a new article of

of expence, without curtailing thoſe that are leſs neceſſary.

He likewiſe laid a plan for a ſchool, deſigned for the education of the opulent citizens; where they might be qualified to fill the principal offices of the republic, and might be inſtructed, not ſo much in thoſe points, which the grammarians of the ſeventeenth century eſteemed the moſt eſſential branches of education, as in thoſe which the philoſophers and men of learning, of the preſent age, have judged to be eſſential to the intereſts of humanity.

M. DE HALLER knew how greatly the miniſters of country pariſhes may contribute to the happineſs of their congregations, when their income enables them to join immediate, and judiciouſly diſtributed, relief to their ſpiritual conſolations. When rendered ſuperior to that neceſſity which is the parent of low paſſions and narrow views, they are capable of uniting knowledge with virtue, and of inſtructing and edifying at the ſame time. He perceived alſo the neceſſity that paſtors, whoſe office it is to guide and inform others, ſhould be independant

dependant of thoſe men, whoſe prejudices and vices it is their duty to reſiſt; and ſhould have no intereſts that may render them inimical to thoſe to whom they ought to perform the office of comforters and friends. He therefore prevailed on the government of Berne to augment the appointments of the clergy of the Pays de Vaud, and he was intruſted with the diſtribution of their increaſed ſalary.

THERE is a council of health eſtabliſhed at Berne, whoſe office

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is not only to guard againſt ſuch abuſes as may affect the lives of the common people, but attend to their neceſſary aſſiſtance. We are not to expect from the populace either attention to their health, or precaution againſt extraordinary misfortunes. They ſeem as if they thought their lives of little conſequence to *themſelves*, but very important to their *ſuperiors*, whoſe buſineſs, they therefore eſteem it, to provide for their preſervation. We find tribunals of this kind in almoſt every country, where the governors, being not greatly diſtinguiſhed

tinguiſhed from the people, may expect to partake of their diſeaſes and dangers; and theſe eſtabliſhments are the more neceſſary, as, without the ſuperintendance of men of extenſive information, ill-grounded fear would prevent the adoption of many new improvements, or afford ſanction to dangerous prejudices, and would frequently give riſe to precautions of ſo tyrannical or ridiculous a nature, as to be nearly as dangerous, as the evils they are deſigned to eradicate.

It is needleſs to obſerve that we are not here deſcribing a tribunal

bunal compoſed of phyſicians only; for it is poſſible that they may be influenced by prejudices or intereſts different from thoſe of the people; but a tribunal of magiſtrates well informed in medicine, and poſſeſſed of a philoſophy capable of elevating them above the prejudices, even of the learned. It is eaſy to perceive the influence M. de Haller was intitled to, in a council of health; and he employed the authority, with which he was inveſted, in making a briſk attack on a ſet of men, known in Switzerland by the name of *Meiges*, who impoſe

impoſe on the credulity of the common people, from whom they obtain credit for their ſkill, in proportion as they boaſt of being uninſtructed in medicine. This confidence is increaſed by their modes of reaſoning being founded on ideas analogous to the popular opinions, and conſequently more intelligible, and likely to impreſs the minds of the multitude; by their almoſt conſtantly uniting ſuperſtitious remarks with their medicines; by their ſometimes employing ſimple, and ſometimes very hazardous medicines; and frequently uſing

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arcana which they have picked up by chance, or boaſt to have been revealed to them by the particular favour of providence: and they often riſe in the opinion of the common people, by pretending to the poſſeſſion of an univerſal medicine; a convenient kind of expedient, by which the phyſician is excuſed from every kind of ſtudy, and the patient inſured from every poſſible error.

M. DE HALLER was deſirous to prevent the accidents which too frequently happen from the ignorance

rance and criminal raſhneſs of theſe empirics; and to counteract the, perhaps, greater evils, which the ridiculous prejudices they had either introduced or eſtabliſhed, had implanted in the minds of the people.

He was, however, ſenſible how neceſſary it is to reſpect the natural right and liberty of the patient, to chuſe the perſon from whom he expects to receive conſolation and aid. And, perhaps, the only method of preſerving the common people from their ill-placed confidence in theſe quacks, without infringing

infringing on that eternal and unchangeable rule of right, which ought to be the regulator of every law, would be to confine our reſtraint to their impoſtures only, and to oppoſe their ignorance by increaſing the means of inſtruction and information.

M. DE HALLER alſo had a ſeat, for ſome time, in the ſupreme conſiſtory, and in the chamber of appeals for the German part of the canton, the ſentences of which tribunal can be reverſed only by the ſovereign council. And, on account

account of the troubles at Geneva, and of the project, approved by the French miniſtry, of building a town and port at Verſoix, on the banks of the Lake of Geneva, he was appointed, with three other members of the grand council, to act in conjunction with the ſecret council of ſtate. He was called on to take a part in theſe important concerns, from the high opinion his fellow citizens entertained of his zeal, and he fully juſtified their confidence by the moſt ſpirited exertions of his abilities. His pen was alſo employed in the public

ſervice, in drawing up various ſtate memoirs, and writing letters on public occaſions. Among other papers of a public nature, he was the author of the directions for preventing the epidemic diſorder among the horned cattle, and of the methods for recovering to life perſons who had been drowned or ſuffocated.

UNACCUSTOMED to admit of any opinion, without recurring to firſt principles, and collecting all his ideas on the ſubject by methodically committing them to writing, he had

had not been long concerned in the government, before he had formed a regular and complete ſyſtem of political œconomy. This ſyſtem he delivered in three publications, compriſed in the form of romances. In the firſt, Uſong, a virtuous and ſenſible deſpotic monarch, makes a great nation happy, by encouraging juſtice and morality. In the ſecond, the ſage Alfred, who is ſuppoſed to be the ſovereign of a country, where the nobility and people have preſerved their rights to a ſhare in the government, gives perfection to the laws,

encourages commerce, arts and ſciences; holds the balance between the different intereſts, with a firm and equitable hand, and corrects abuſes by paying regard to eſtabliſhed forms. The third affords a picture of an ariſtocracy. In theſe three works we behold the humane and virtuous philoſopher: But perhaps one common defect may be objected to them all, viz. that talents and virtues are attributed to thoſe who govern, ſuperior to the reſt of mankind. It ſhould ſeem, on the contrary, to be the beſt policy in thoſe governments,

ments, where power is hereditary, to determine on the moſt ſalutary laws, without expecting to find, in princes, better intentions or greater degrees of virtue, judgment, underſtanding, or courage, than are poſſeſſed by the generality of men, who have received a proper education. Theſe works are incomplete, as not containing a fourth part, which ſhould have deſcribed a perfect democracy. But the execution of this part of the plan would have expoſed M. de Haller to the danger of giving offence to the ariſtocratic ſpirit, which pre-

vails at Berne. The limits of theſe ſtates are ſometimes ſo ſlightly ſeparated; the tranſition from one to the other is often ſo eaſy; and, in ſhort, in ariſtocratic republics, where there is always a popular party, the impoſſibility of a well regulated democracy is ſo generally the only public argument oppoſed to it, that we muſt not be ſurpriſed that the democratic romance, which ſeems ſo neceſſary to complete M. de Haller's political works, ſhould have been entirely omitted.

His

His attention, however, to his duties as a magiſtrate, did not entirely take him off from his phyſical purſuits. His experiments on incubated eggs were made at Berne; he diligently employed himſelf in completing his phyſiology, arranging his bibliothecas, and collecting his ſcattered works under different titles: he continued to ſend memoirs to moſt of the learned ſocieties of which he was a member: it would be too tedious to recite the titles of theſe papers; but ſuch was their merit, that they would of themſelves furniſh ma-

terials for the eulogium of any other perſon. He alſo furniſhed the ſupplements to the Encyclopedie, with articles on the ſubjects of anatomy, medicine and phyſiology. That extenſive knowledge, and deep penetration, which diſtinguiſh all his phyſical works, are ſtill more ſtriking in theſe articles, in which the nature of his work obliged him to inſert a greater number of ideas in a ſmall compaſs, and the reader is at once aſtoniſhed at the preciſion and elegance of his ſtyle. In ſome ſmall tracts which he wrote in French, we diſcover a gravity

gravity and ſtrength of diction, joined to a purity of language, and propriety of expreſſion, which would have been meritorious even in a Frenchman, and cannot be ſufficiently admired in a foreigner; and he enjoyed the peculiar diſtinction of being a great poet in the German, and an eminent proſe writer in the French language.

During the time he reſided at Roche, he made ſeveral botanic excurſions into the neighbouring mountains. His advanced age made theſe journeys troubleſome

to

to him, but they contributed to give greater perfection to the laſt edition of his collection of plants, indigenous to Switzerland. In a journey which he took into the Vallais, in 1757, he was in imminent danger of falling, in his carriage, from a wooden bridge, into a torrent which ruſhed at the bottom of a precipice.

As perpetual preſident of the academy of Gottingen, he remitted not, during his abſence, his attention to their intereſts. And his Britannic Majeſty, on the death of M. de

M. de Moſheim, offered Haller the chancellorſhip of the univerſity. Being warmly ſolicited by the Regency of Hanover to accept of that office, and divided between his attachment to his country, and the proper gratitude he owed to his royal patron, he communicated the offers that had been made him, to the ſovereign council of Berne. The republic, deſirous of retaining, and fixing him more firmly to the ſervice of the ſtate, aſſured him of their wiſh, and ſettled a penſion on him for his life. He preferred this invitation to the greater advantages

vantages he might have received abroad; and made uſe of it as an apology to the Regency of Hanover. His Britannic Majeſty himſelf having written to the republic to demand him, the propoſal was declined in a manner the moſt ſatisfactory to him.

He afterwards excuſed himſelf to Lord Marſhal Keith, who in the name of the king of Pruſſia offered him the chancellorſhip of the univerſity of Halle, vacant by the death of the celebrated Wolf; and likewiſe to count d'Orlow,

d'Orlow, who propoſed to him an eſtabliſhment at Peterſburgh. The king of Sweden ſent him the order of the Polar Star, and the warm terms, in which M. le count de Scheffer aſſured him of the eſteem of his Majeſty, added to the value of the favour.

All the learned ſocieties in Europe vied with each other in evincing their regard for him. The academy of ſciences at Paris, who can only diſpoſe of eight places in favour of foreigners, beſtowed one of them on M. Haller

in

in 1754, and the count d'Argenſon acquainted him of his nomination. No leſs than thirteen other literary academies or ſocieties, after his return to Berne, were deſirous of inſerting his name in the liſt of their members.

Such was the eſteem with which he was regarded wherever the ſciences were cultivated, that all ſtrangers, even the ſovereign princes who travelled into Switzerland, paid a kind of homage to his reputation and learning, by perſonally viſiting him. During his laſt illneſs,

illneſs, he was honoured by the company of that illuſtrious traveller, the emperor of Germany, who remained a conſiderable time with him in familiar converſation.

M. DE HALLER was born with a delicate conſtitution, which he had ſtrengthened by temperance; for the only exceſs he indulged in was, the moſt excuſable of all others, that of ſtudy. But though the effects of intenſe application to letters, on the conſtitution, are often ſlow, they are, in general, ſeverely felt at ſome period of life. It has been

been already mentioned that he was ſubject to inflammatory diſorders, and he had alſo ſuffered ſeveral attacks of the gout; but in the laſt years of his life he was afflicted with a diſeaſe in his bladder, which proved fatal to him, after a long continued ſeries of moſt excruciating pain. Opium was the only medicine that afforded him any relief; and if it muſt be allowed that it ſhortened his days, it certainly mitigated the torments of the latter part of his life. It was even happy for him that opium, which generally benumbs or diſturbs

turbs our faculties, did not deprive him of the power to purſue his ſtudies. But a few days before his death, he employed himſelf in his favourite occupation of re-touching his works; and though reduced for a long time to the neceſſity of confining himſelf to his houſe, and even to his room, he continued to enjoy the ſociety of his friends. And in this ſituation he received the beſt recompence of a good father of a family, in the affectionate and conſtant attention of his wife and children.

In the midſt of theſe ſufferings, he put the finiſhing hand to his phyſiology; and he drew up a regular journal of his diſorder, which he ſent to the academy of Gottingen. Suppoſing the abilities to be equal, the patient himſelf ſhould be more capable of making obſervations than any other perſon; but unfortunately a ſick man has ſeldom that ſerenity of mind to be an accurate obſerver. M. de Haller perceived the approach of death, and confiding firmly in that God whom he had faithfully ſerved, and prepared to render to him an account

count of a life which had been ſpent in the ſtudy of nature, and in doing good to his fellow creatures, he looked forward to his diſſolution without diſmay or impatience.

He deſired his friend and phyſician, M. Roſſelet, not to conceal from him his real ſituation; and this gentleman ventured to tell him that the autumn of 1777 would probably be the period of his exiſtence. Haller exhibited no ſigns of fear at the information; continued his uſual modes of life;

and in his laſt moments employed himſelf in marking the decay of his organs. He felt his pulſe from time to time: "My friend," ſaid he, to M. Roſſelet, with great tranquillity, "the artery no longer beats," and immediately he expired. He was gathered to his fathers, at the age of ſixty-nine years, on the 12th day of December, 1777. Humanity had, in this year, reaſon to deplore the loſs of ſeveral extraordinary men, who ſeemed born to explain or defend her rights. In leſs than eight months ſhe loſt Juſſieu, Haller, Linnæus,

Linnæus, Voltaire and Rouſſeau. Surely never was there an æra equally fatal to ſcience and literature, nor did they ever, in ſo ſhort a ſpace of time, experience ſuch great and multiplied loſſes.

M. DE HALLER was moſt agreeable in converſation. His elocution was free, ſtrong and conciſe; and his knowledge moſt diſtinguiſhedly diverſified. His immenſe reading, fertile and faithful memory, and ſound judgment, gave ſatisfaction to men of all diſpoſitions. He was ſuperior to the

affectation of wit; and disdained to make a parade of the knowledge he possessed. His soul was gentle, and his heart replete with sensibility. All his writings are expressive of his love of virtue. Ever pure in his own morals, he beheld with regret the neglect of them in others; and sincerely lamented the influence which irregularities in private life seemed likely to produce on the manners of the state.

Religion was the object of his most serious inquiries, even from his

his earlieſt youth. His comprehenſive mind, ever capable of a juſt mode of thinking, had been happily impreſſed with the grand idea of a God, the great origin of all beings, and with the belief of eternity, "that ancient ſource "as well as univerſal ſepulchre of "worlds and ages, in which the "duration of this globe is loſt as "that of a day, and the life of "man as a moment." Perſuaded of a future life, he waited with confidence for that conſummation which ſhall diſſipate the miſts of human wiſdom, and diſplay to us

the univerſe ſuch as it actually is, by the light of a new luminary, emanating from the Divinity himſelf.—It was impoſſible that a ſpirit thus elevated, and conſtantly employed in reſearches after truth, could neglect to inquire into that moſt important one, the religion of his anceſtors and of his country. Convinced of the reality of revelation, by diligently ſtudying the ſcriptures, he could not behold, with indifference, any attacks on this fundamental law, this ſtrongeſt band of ſociety; and, at a time, when other illuſtrious men proſti-

tuted

tuted their fame and talents in making dangerous attacks upon religion, he thought it his duty to enter the lists as her avowed champion and defender.

Few learned men have been born with so active a disposition, and few have lost so little time as Haller. His life was spent in his library, surrounded by his pupils, by his friends, by his fellow citizens, his children and his wife, whom he had inspired with a taste for the sciences, and who all were employed, under his inspection, either

either in making extracts from books, or delineating plants and animals.

A CONSIDERABLE increaſe in his bulk, weak eyes, and the habit of writing in ſo ſmall a character, as to be almoſt illegible, neceſſarily rendered application to literary purſuits more difficult. Yet ſo abſolute was the dominion of his taſte for ſtudy, that he could not abſtain from writing and reading, without reſerve, immediately after his meals, and at unſeaſonable hours of the night. His impatience

was

was even ſo great under the conſtrained abſtinence from theſe purſuits, which ſickneſs ſometimes occaſioned, that he appeared more anxious to curtail the duration, than to eradicate the principles, of his malady. Nay, ſuch was his activity, that, once, when he had broken his right arm, the ſurgeon, when viſiting him the next morning, was ſurpriſed to find him writing, with ſufficient facility, with his left hand. And it is ſurpriſing, that with ſuch intenſe application, he ſhould arrive at ſo advanced an age: for his whole life was, in the

the ſtricteſt ſenſe, one continued ſacrifice of his pleaſures and health to his love of ſcience.

M. DE HALLER was, in his perſon, tall and well proportioned. His countenance, which had acquired a ſerious caſt, from his ſhort ſight, and the habitual tenſion of his muſcles, was full of expreſſion, and changed in proportion to the degree of energy in the ideas which occupied his mind.

M. DE HALLER had eleven children. One of his ſons, who is a member

member of the ſovereign council of Berne, treads in the ſteps of his father, and, like him, is occupied in the cultivation of ſcience and the ſervice of his country.

M. HALLER's place, as a foreign aſſociate, in the French academy of ſciences, was ſupplied by M. Tronchin, who had likewiſe been a diſciple of the celebrated Boerhaave.

POSTSCRIPT.

HALLER carried on a correſpondence with ſeveral learned men in every part of Europe; the following liſt of thoſe in this kingdom, who were ſo happy to enjoy that favour, was ſent over by his ſon, and may not prove unacceptable to the reader.

John Balfour.
Earl of Bute.
George Clifford.
Lord Carteret.
Peter Collinſon, F.R.S.
W. Cowper.

Dillenius.

Dillenius.

Robert Emmett.

Matthew Flemyng.

John Reinhold Forſter, F.R.S.

George Grierſon.

William Hudſon, F.R.S.

John Hill.

William Hunter, M.D. F.R.S.

N. Jenty.

James Johnſtone.

J. A. de Luc, F.R.S.

Cromwell Mortimer, Eſq.

Alexander Monro, M.D.

Donald Monro, M.D. F.R.S.

M. Maty, M.D. F.R.S.

David Macbride, M.D.

Turberville Needham, F.R.S. &c.

Sir John Pringle, Bart. M.D. F.R.S. &c.

Thomas

Thomas Percival, M.D. F.R.S. &c.
Thomas Pennant, Eſq. F.R.S. &c.
Joſeph Planta, F.R.S.
Robert Ramſay.
Sir Hans Sloane, Bart. M.D. F.R.S.
Humphrey Sibthorpe, M.D.
J. Sutton.
J. Sackville.
John Strange, Eſq. F.R.S. &c.
Samuel Foart Simmons, M.D. F.R.S. &c.
Rodolph de Valltravers, Eſq. F.R.S. &c.
Robert Whytt, M.D.
Arthur Young, Eſq. F.R.S.

His valuable library, conſiſting of 13512 volumes, on the ſubjects of anatomy, ſurgery, the practice of phyſic, botany and natural hiſtory,

tory, including his diaries, herbaria viva, and near 150 manuſcripts, moſtly written with his own hand, was offered to ſale to ſome of the London bookſellers, a number of whom agreed to unite in treating for it. But before they had taken any further meaſures, it was purchaſed by that truly patriotic monarch, the emperor of Germany.

THE END.

ERRATA.

Page 23, erase the mark over *Plantas.*
90, line last, for *Society*, read *University.*

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